

GOVERNMENT OF TELANGANA
ABSTRACT

Irrigation & CAD Department – Completion of on-going Major and Medium Irrigation Projects –Comprehensive measures – Orders – Issued.

IRRIGATION AND CAD (REFORMS) DEPARTMENT

G.O.Ms. No. 146

Dated : 08-10-2015.
Read the following:-

1. Representation of the Builders Association of India, Telangana State Letter No.BAI/265/2014-15, Dt:02.03.2015.
2. Govt. Memo No. 2154/Reforms/A2/2015, Dt: 29-04-2015.
3. From the ENC(Irrigation), Hyderabad Letter No.ENC (I)/DCE IV/OT4/AEE10/Escalation/2015, dt: 18-05-2015.
4. G.O.Rt.No. 1657, GAD (Cabinet) Department, Dt: 12-06-2015.
5. Recommendations of the Cabinet Sub-Committee, Dt: 24-06-2015.
6. Govt. Memo No. 2154/Reforms/A2/2015, dt: 01-09-2015.
7. From the ENC(Irrigation), Hyderabad Lr.No.ENC(I)/DCE-IV/OT-4/AEE-12/ Escalation/2015, Dt: 09-09-2015.
8. From the ENC (Irrigation), Hyderabad Lr.No.ENC(Irri)DCE-IV/OT-4/AEE-II/Escalation/2015, dt: 29.09.2015.
9. Suggestions of ENCs and CEs on the draft consultation paper.

ORDER:

In the reference 1st read above, the Builders Association of India (BAI) highlighted the difficulties encountered by their members in completing on-going Major and Medium Irrigation Projects taken up in Telangana by the erstwhile Government in the years from 2004 to 2009 and requested the Government to take necessary steps to facilitate completion of on-going irrigation projects without any further delay. Accordingly, the Government vide reference 2nd read above, constituted an Experts Committee to examine the issues faced/represented by the members of Builders Association of India and to give their comprehensive recommendations for completing the on-going irrigation projects.

2. In the reference 3rd read above, the Engineer-in-Chief (Irrigation) has forwarded the Report of Experts Committee along with his recommendations for adopting a pragmatic methodology to complete the on-going projects in a time bound manner. The Cabinet Sub-Committee was constituted vide G.O. 4th read above under the Chairmanship of Hon'ble Deputy Chief Minister and Minister for Education, further examined this issue and gave their recommendations vide reference 5th read above.

3. After considering above, the Government agree for taking further action on the basis of the following facts:

3.1. Basis for taking further action.

- a) Most cost effective options should be exercised to bring the contemplated benefits of various projects to the people at the earliest.
- b) Only cases of those agencies should be considered where the project authorities are satisfied that the lapses were not on the part of the agency; and delay is due to reasons not attributable to the agency. This step rules out consideration of cases of the agencies where action had been taken under either PS 60C or 61 of the Agreement. But however it will be considered for the agencies, who have been entrusted work under PS 60(C) of standard specifications.

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- c) The issues such as LA/RR/Forest Clearances / Railways / NHAI crossings that caused delays in the first place should have either been resolved or could be resolvable in a foreseeable future within a definite time frame.
 - d) All the designs have been submitted / to be submitted by the agencies and approved or likely to be approved by the competent authority in a foreseeable future.
 - e) Completion of the project or certain packages leads to providing contemplated ayacut and other benefits to citizens.
- 3.2. It is prudent and economical (both financially and in terms of time) to consider demands of BAI instead of closing the on-going agreements and calling for fresh bids at the current SSRs. Closing of agreements may also lead to a large number of legal cases leading to indefinite financial liabilities to the Government in future. However, the cases where the cost of completing balance work as per current SSR is less than the cost of price adjustment and other measures proposed, action will be taken by the department by opting for following the current SSR.
- 3.3. Such cases may be considered for price adjustment on labour and other material with effect from 01.04.2013, while variations on concrete items has to be done on the basis of actual quantities versus that stipulated in IBM/ Estimate as were originally incorporated while taking up the concerned works. Cases submitted by the project authorities and recommended by the State Level Standing Committee of Engineers (SLSC), shall be referred to the High Power Committee (HPC) headed by Special CS (Finance) as the Chairman, and Secretary (Law) & Principal Secretary (I&CAD) as members for further examination. Based on the recommendations of HPC, all such project/package wise proposals will be approved by the Government.
4. The Government after careful examination of the matter hereby consider and order as follows:
- (a)** In addition to steel, cement and POL, price adjustment will be admissible for labour and other material components also for the work done after 01-04-2013, based on All India Indices and procedures prescribed in the order. Price adjustment on electro-mechanical works shall be considered on the basis of IEEMA (Indian Electrical and Electronic Manufacturers Association) and IPMA (Indian Pump Manufacturers Association) procedure. The works/packages that have been completed prior to 01-04-2013 are not eligible under the scheme now proposed.
 - (b)** In order to implement this order, main canal and branch canals will be considered if they cover more than 10,000 acres and above. The rest of conveyance system will be considered as distributary network. For distributary network, the prevailing rates issued vide Government orders (Memo No.34843/Reforms/A1/ 2006, dt: 04-01-2010) will be applied for the balance network as on 01-04-2013, in cases where the rates entered as per the Agreement are lower than those approved in the said memo.
 - (c)** Variation in quantum of all Concrete in head works, main and branch canals (having ayacut more than 10,000 acres), due to additional structures and lining, variations due to the increased standards of R & B etc, over that proposed in the IBM estimates is to be considered. The actual amount due to the agency shall be paid only after arriving at the net overall value of quantity in the package in the agreements live as on 01-04-2013. However, variation in earth work quantities shall not be considered.

- (d) For Controlled blasting resorted / required to excavate the rock portion for safety of Habitations, Railway lines, HT lines and other structures etc., the additional amount involved shall be calculated and recommended to the Government, after due verification by the Committee of Chief Engineers consisting of Chief Engineer (CDO), Chief Engineer (QC) and the concerned Chief Engineer as the member convener.
- (e) In view of the policy of supplying sand through stock yards maintained by Mining Department on a fixed rate which is reported to be higher than provided in the estimates, the extra cost including the transportation over the estimate / IBM provision shall be considered based on the rate fixed by the Government subject to production of vouchers issued by the Mining Corporation for the concerned works. Correspondingly, the cost of the sand item at the work site as per the IBM/estimate is to be deleted from other material components for calculating price adjustment to avoid double payment.
- (f) Keeping in view the importance of AMRP-SLBC Tunnel work, reimbursement of variation in foreign exchange shall also be considered w.e.f 01.04.2013, in addition to price adjustment for labour and other materials.
- (g) Pre-closure of individual package works with mutual consent may be considered justifying with proper reasons which include difficulties / abnormal delay in land acquisition, lack of statutory clearances, project re-engineering and other bottlenecks etc., applicable only to that particular package or a part of the package.
- (h) Although, different banks charge different BG Commissions as per the banker customer relationship, it also varies with the duration of guarantee. Commission on Bank Guarantees and Insurance premium shall be reimbursed as per the actuals subject to an upper limit of 3% per annum of guaranteed amount (based on public sector banks/ insurance companies) beyond the agreement period. In order to further contain BG Commission and Insurance Premium, the Department shall take appropriate action duly revising the bank guarantee required only for the balance work.
- (i) **Payment Schedule:** Arrears pertaining to insurance and Bank Guarantee beyond the agreement period shall be paid as per actuals upfront after signing the supplementary agreement. All arrears accruing due to price adjustment for labour and other materials for the work done after 01-04-2013, and arrears accruing due to overall variation in the quantity of concrete shall be paid as per the above provisions as given below.
 - (i) 40% of additional amount as arrived as per the provisions of these instructions shall be paid after issue of Government orders subject to the amounts so arrived at being less than the amount available with the department of the agency by way of deposits (Bank Guarantee, Further Security deposit etc).
 - (ii) Another 40% of additional amount shall be paid against the Bank Guarantee (Valid till the completion of total work) submitted by the Agency. Otherwise, 40% of additional amount shall be paid along with running work bills in same proportion as the physical milestones achieved from the balance work, e.g., if work bill is 1% of the balance work, then the payable arrears amount in that month will also be 1% of the 40% of additional amount.
 - (iii) The balance 20% of additional amount shall be paid along with the final bill at the completion of work.

- (j) The agencies carrying out the work under existing agreements or supplementary agreements will not be eligible for reliefs extended by the Government unless they sign fresh agreements indemnifying the Government from all the future liabilities and litigation or arbitration proceedings due to any reason whatsoever.
5. The safe guards and implementation methodology including procedure for price adjustments and procedure for variations on estimated quantities for structures (Annexure-I & II) have been worked out in consultation with Engineer-in-Chiefs and Chief Engineers and are appended to this order.
6. The above orders are applicable to the list of projects along with the number of packages as appended in the Annexure –III and IV to these orders.
7. While sending the proposals for consideration, the concerned Chief Engineer /Superintend Engineer should ensure that the total expenditure incurred (on works, Land Acquisition/procurement etc.,) including price adjustment does not exceed the amount as given in administrative sanction. In cases where it is needed, proposal for revised administrative sanction should be submitted by the concerned Chief Engineer /Superintend Engineer.
8. In order to ensure implementation of these instructions, Engineer-in-Chief (Irrigation) will organize a workshop with the project engineering divisions and concerned payment controlling authorities to have uniform understanding/ interpretation of these instructions.
9. The Engineer in Chief (Irrigation) is further, directed to prescribe an appropriate format to be used by the concerned officials for preparing and submitting project /package wise details and for certifications for implementing this order. He shall also suggest a draft supplementary agreement to be concluded between the department and agency for various packages.
10. This order issues with the concurrence of Finance (WP) Department vide their U.O.No.11687/204/WP/A1/2015, dt: 23-09-2015.

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF TELANGANA)

Dr. SHAILENDRA KUMAR JOSHI
PRINCIPAL SECRETARY TO GOVERNMENT

To
The Engineer-In-Chief(Irrigation),Jalsoudha Building, Hyderabad
All Engineer-In-Chief's and the Chief Engineers, Irrigation & CAD Department.
Copy to:- The Finance (W.P) Department.
The LAW Department.
The GA(Cabinet) Department.
The Accountant General /Principal Accountant General, Telangana, Hyderabad.
The Director Works & Accounts, Telangana, Hyderabad.
P.S. to Addl. Secretary to Hon'ble Chief Minister.
P.S. to Hon'ble Minister, I&CAD Department.
P.S. to Chief Secretary to Government.
P.S. Spl. Chief Secretary, Finance Department.
P.S. to Prl.Secretary, I&CAD Department.
P.S to Secretary, Law Department.
The Dy. Director Monitoring Wing, I&CAD Department.
All Sections/Offices in I&CAD Department.
SF/SC (C.No.2154/Reforms/2015).

//FORWARDED::BY ORDER//

SECTION OFFICER

**Annexure -I to G.O.Ms.No. 146 ,I&CAD(Reforms) Department,
Dated: 08-10-2015**

The suggested safeguards for following a uniform process by the project Chief Engineers /Superintend Engineers

- (i). Certification of the total land (required for project/ package including area under submergence) and handed over to the contractor; and other clearances received should be done by the concerned Superintend Engineer/Executive Engineer. If Land is yet to be acquired/procured, clear time schedule for the same shall be given by Land Acquisition/Procurement Officer (LAO/LPO), certified by Special Collector / Joint Collector (where Special Collector is not available) and SE for the next 180 days. Similarly, for other statutory clearances which are yet to be received, the Superintend Engineer will indicate the time frame in consultation with the concerned Departments. The EOT proposal by the contractor shall be reviewed and assessed in view of this schedule for 180 days. In order to keep the agreement alive and to facilitate the above process, the Chief Engineer shall give an interim extension of time till next three months from the date of issue of these orders, duly mentioning the last validity of the agreement and date to which the period of contract is being extended.
- (ii) The concerned Superintend Engineer/Executive Engineer will certify the total designs and drawings required, approved and handed over to the contractor. If drawings and designs are yet to be approved, clear schedule for the same shall be given.
- (iii). The final mile stone program has to be obtained from the agency duly synchronizing with the above bottlenecks. After ascertaining the actual amount of arrears accruable to the agency for the said price adjustments, an undertaking from the concerned agency shall be taken duly indemnifying the Government from all future liabilities & claims and also agreeing to sign a supplementary agreement to that effect and that no further extensions except this last one will be allowed and penal action will be initiated as per terms and conditions of the Agreement.
- (iv). All the Project Authorities will sign a supplementary agreement with the agencies on the above lines after approval of the proposal by the Government.

Dr. SHAILENDRA KUMAR JOSHI
PRINCIPAL SECRETARY TO GOVERNMENT

//FORWARDED::BY ORDER//

SECTION OFFICER

**Annexure -II to G.O.Ms.No. 146, I&CAD (Reforms) Department,
Dated: 08 -10-2015**

IMPLEMENTATION METHODOLOGY:

After undertaking package wise verification, the concerned Superintend Engineer shall forward the details to the Chief Engineer for consideration by the State Level Standing Committee. The verification shall be done in following manner:

- 1). A schematic diagram of all components of the package will be made and status of work will be shown in different colours (green completed, yellow under progress, and red yet to be taken up) including, the structures etc. They will be depicted for the complete package indicating work done and yet to be done both in physical / financial terms including land acquisition status.
- 2). Simultaneously, Agency should submit proposals to Executive Engineer for balance works containing the following mandatory details.
 - I) Details of work done and balance works (physical & financial)
 - II) Schedule for submission of Drawings / Designs for balance works.
 - III) Schedule of submission of Land Plan Schedules for balance activity.
 - IV) Detailed Fortnightly Schedule for completion of balance works (both physical & financial).
 - V) Clear schedule of Manpower, machinery and material required for completing balance work.
- 3). Concerned Superintend Engineer and Special Collector will jointly certify the total land required, handed over and in the process of acquisition/ procurement, each package-wise to ensure taking up the work unhindered. For the balance Land Acquisition/Procurement to be done, a clear schedule for the same shall be given by LAO/LPO and certified by the concerned Superintend Engineer for next 180 days.
- 4). Similarly, the concerned Superintend Engineer shall indicate the status of all statutory clearances and other bottlenecks such as Railways, NHAI etc., shall certify the expected time frame of clearances in consultation with the concerned Departments.
- 5). The concerned Superintend Engineer /Chief Engineer will certify all the designs required to carry out the work are approved and are given to the agency to proceed with the work. If designs are due from the agency, or due to be approved by the Department, then a schedule of submission of designs and its approval within next 180 days shall be given.
- 6). Concerned Superintend Engineer /Chief Engineer will also indicate works which can be or need to be closed along with clear reasons for his opinion. The same may be reviewed by the State Level Standing Committee.
- 7). After consolidating the package-wise information, the Chief Engineer will undertake an exercise for the full project and indicate head works, canal works etc., (source and conveyance system for taking water to fields) and then indicate those works (full/part of packages) which cannot be taken up in next 180 days, and then recommend deletion of such portion of work from the respective individual package. For the work which remains with the existing agency, the Chief Engineer will recommend one final EOT and separately delete works which are not going to get land in the next 180 days.

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- 8). Once the above exercise is done and the responsibility on all the officers is fixed (including Land Acquisition/ Procurement), the Chief Engineer will take an undertaking from the concerned agency duly indemnifying the Government from all future liabilities and also agreeing to sign a supplementary agreement to the effect that no further extension except this last one will be allowed and termination of the contract will be under PS 61 of Standard Specifications (complete liability on the agency for completion of the works in the supplementary agreement in all respects). The Chief Engineer will then recommend to State Level Standing Committee (SLSC) for further recommendation to Government for approval.
- 9). The State Level Standing Committee shall verify, satisfy and then make recommendations for all the works based on the above guidelines. The High Power Committee shall examine the proposals for continuation of works along with financial implications, prioritize and make suitable recommendations to Government in Irrigation Department.
- 10). A fortnightly report on the progress of each project shall be submitted to the Government through Engineer-in-Chief (Irrigation) on the progress of each package as approved by the Government.

PROCEDURE FOR PRICE ADJUSTMENT:

- (a). Price adjustment for labour and other materials is applicable only for the EPC works for which original Agreement period is completed, work is incomplete and extension of time is enforce.
- (b). Price adjustment for labour and other materials is applicable only for the value of the work done from 01.04.2013.
- (c). The items of balance works and their quantities of each package as on 01.04.2013 shall be prepared as per the IBM/Estimate (excluding the distributary system as per the Govt. MemoNo.34843/Reforms-A1/2006, Dt.: 4.1.2010).
- (d). The cost of (i) cement, (ii) steel, (iii) labour, (iv) Electro Mechanical & Hydro Mechanical, and (v) fuel components of each item of work shall be calculated based on the data adopted in IBM. If the cost of fuel and Electro Mechanical & Hydro Mechanical (EM&HM) is already approved for the package, such cost shall be calculated based on the approved fuel component and Electro Mechanical & Hydro Mechanical (EM&HM). The other materials component shall be taken as total cost of the items of the work as per sub-para (c) above minus cost of (Cement + Steel + Fuel + Labour + EM&HM components) and also sand in applicable cases in view of para 4(e) of this order.
- (e). The calculation of other material components is only approximate and the actual percentage of various components shall be arrived at the end of execution and the necessary adjustment shall be made.
- (f). If the separation of the above components is not possible in the data adopted for IBM, the data of 2009-10 (the year in which the new standard data is published) shall be considered for arriving at the cost of various components for each item of work.
- (g). The total cost of labour and material component in the package shall be calculated by adding the cost arrived for each item as per sub-para (d) above.

- (h). The total cost of labour and material component shall be divided by the total cost of the working items of the package listed as per sub-para (c) above to arrive at the percentage of each component for the entire package.

- (i). The value of price adjustment for labour component for each month from 01.04.2013 shall be calculated with the following formula.

$$V_L = 0.85 \times (P_L/100) \times R \times (L_i - L_o)/L_o$$

P_L = % factor for labour component arrived as per para (h)

R = Total value of work done during the month

L_i = All India Consumer Price Index for Industrial workers for that month

L_o = 1.05 X All India Consumer Price Index for Industrial workers as on the month of last date for filing of bids.

- (j). The value of price adjustment for other materials component for each month from 01.04.2013 shall be calculated with the following formula.

$$V_{om} = 0.85 \times (P_{om}/100) \times R \times (O_{mi} - O_{mo})/O_{mo}$$

P_{om} = % factor for other materials calculated as per para (h)

R = Value of work done during the month

O_{mi} = Price Index for all commodities during the month

O_{mo} = 1.05 X Price Index for all commodities as on the month of last date for filing of bids if $O_{mi} > O_{mo}$

0.95 X Price Index for all commodities as on the month of last date for filing of bids if $O_{mi} < O_{mo}$

- (k). Price adjustment for fuel shall continue to be paid as per the procedure being followed now, with % fuel factor to be considered as per the circular instructions given for concrete, earth work and Tunnels by the SLSC (Annexure enclosed V, VI and VII respectively).
- (l). Price adjustment for cement and steel shall continue to be paid as per actuals, irrespective of the percentage of these components calculated as per sub-para (h) above.
- (m). At the end of execution of the entire package, the percentage of each component shall be reconciled and necessary adjustments shall be made in the final bill.

PROCEDURE FOR VARIATION FROM ESTIMATED QUANTITIES FOR STRUCTURES:

- (1). Variation in quantities of all Concrete (due to additional structures, lining etc.) and variations due to the increased standards of R & B etc., over that proposed in the IBM estimates is to be considered.
- (2). To work out the actual quantities, the detailed quantities of the structures already executed so far shall be estimated as per the approved Drawings and measurements recorded. These Designs and Drawings should have been approved by the competent authority. Similarly, for the balance structures to be constructed estimated quantities shall be worked out as per the approved Designs and Drawings by the competent authority. After working out the overall quantities of the structures including additional structures, the variation in the quantities vis-à-vis the sanctioned estimated /IBM quantities shall be worked out for works executed/to be executed after 01-04-2013 for arriving at the amounts involved additionally for such variation. The rate for the variation in quantities will be as per the relevant SSR of the sanctioned estimate and the data adopted. Wherever data is not available, the SOR data of 2009 shall be adopted only for the purpose of break-up. The rate shall also reflect the tender premium / discount of the concerned package.

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- (3). Where detailed quantities of structures are not indicated in the sanctioned /approved IBM estimates, i.e. structures cost are based on cost curve basis, then the total value structures in the sanctioned IBM estimates shall be taken into consideration for comparing the total value of structures as per actual involved with sanctioned SSR for working out the net variation in value due to variation in quantities.
- (4) In this regard, Superintend Engineer/Executive Engineer shall take into consideration following issues:
- (i) Essentiality of the structures yet to be constructed
 - (ii) Verification of data submitted by agency and comparison with existing IBM estimates with relevant S.S.R.
 - (iii) Executive Engineer and Dy. Superintend Engineer in the Circle are responsible for accuracy of the quantities and the estimate as per approved Designs and Drawings.
 - (iv) Superintend Engineer will be responsible for the data and rates adopted in the estimate.
 - (v) Chief Engineer concerned will present all the above details to the SLSC and take its recommendations for presenting to Government about the amounts involved due to variation in quantities.
 - (vi) The Chief Engineer will send a consolidated list of works/packages that will be covered under these modifications. The Engineer-in-Chief (Irrigation) will consolidate and prepare a final comprehensive list to be covered under this order. This is necessary to prevent adding projects/packages in the future.
 - (vii) All the works taken up will be checked by an independent quality control mechanism before processing the bills for payment. The procedure shall be as follows:

“The Departmental Quality control wing headed by the Chief Engineer, Quality Control will check and verify the EPC works independently as per the procedure prescribed from time to time during execution of works and while making bills payment”.

Dr. SHAILENDRA KUMAR JOSHI
PRINCIPAL SECRETARY TO GOVERNMENT

//FORWARDED::BY ORDER//

SECTION OFFICER

**Annexure-III to G.O.Ms.No. 146 , I & CAD (Reforms) Department,
Dated: 08-10-2015**

LIST OF MAJOR AND MEDIUM IRRIGATION PROJECTS		
Sl.No.	Name of the Project	No. of Packages
1	J Chokka Rao-Devadula LI Scheme	15
2	SRSP Stage-II	4
3	AMRP	4
4	Rajiv Sagar Dummugudem Lift Irrigation Scheme	7
5	Indira Rudramkota Dummugudem Lift Irrigation Scheme	7
6	Mahatma Gandhi -Kalwakurthy LIS	6
7	Rajiv - Bhima LI Scheme including SBBR	18
8	Jawahar Nettampadu LI Scheme	10
9	Koilsagar	2
10	Sripada Yellampally Project	9
11	Kaleswaram Lift Irrigation Scheme	1
12	Indiramma Flood Flow Canal from SRSP	10
13	M.Bagareddy (Singur) project-Canal	2
	MAJOR TOTAL	95
	MEDIUM PROJECTS	
14	Kinnerasani Reservoir Scheme	1
15	Palemvagu project	1
16	Modikuntavagu	1
17	Gollavagu	1
18	Ralivagu	1
19	Neelwai	1
20	Komarambheem	1
21	Peddavagu at Jagannadhpur	1
22	Mathadivagu	1
23	Choutapalli Hanumantha Reddy LIS	1
24	Lendi Project	1
25	Flood Banks Warangal & Khammam	5
	MEDIUM TOTAL	16
	GRAND TOTAL	111

Dr. SHAIENDRA KUMAR JOSHI
PRINCIPAL SECRETARY TO GOVERNMENT

//FORWARDED::BY ORDER//

SECTION OFFICER

**ANNEXURE –IV to G.O.Ms.No. 146, I&CAD(Reforms)Department,
Dated: 08-10-2015**

LIST OF EPC PACKAGES UNDER MAJOR & MEDIUM ONGOING PROJECTS

S.No	Name of the Project	Package No./ Package Name	Name of the Agency
1	2	3	4
1	(1) J.Chokka Rao - Devadula LIS (Phase I)	C2-45	M/s. Sudarshan Reddy & Venkateshwarlu
2		C2-46	M/s. Sudarshan Reddy & Venkateshwarlu
3	Phase II	OC-34/1/04-05	M/s. HCC-NCC (JV)
4		C2- RS Ghanpur Disty System	Sri Satyamurthy & M/s Venkateshwarlu (JV)
5		C2 - Tapaspally Disty System	GH Reddy-KK Reddy
6		C2 - Aswaraopally Disty System	M/s Rani Constr.
7		4L Distributary	M/S.UAN MAX Infra and RPPL(JV) ,Hyderabad.
8	Phase III	Pack No.1	M/s HCC –MEIL-CBE (JV)
9		Pckg No. 2	Costal Projects (P) Ltd,Patel Engg.Ltd., Jyothi Ltd., CBE, Consortiem
10		Pckg No. 3	M/s HCC,SEW, MEIL,AAG,(JV)
11		Pckg No 4	NCC,MEIL,ZBS,Zigma, Constoriem (JV)
12		Pckg No 5	M/S MEIL-Prasad-KBL
13		Pckg No 6	M/S SEW & Kranthi(JV)
14		Pckg No 7	M/s SSSI PL-SSLCC- RMMC
15		Pckg No 8	M/s VPR,MRKR, RK(JV)
16	(2) Sri Ram Sagar Project Stage II	C2-52	M/s. Sudarshan Reddy & K Venkateshwarlu & Co (JV)
17		C2-53	M/s. R.R. Mohite & Co. Bhuratnam & Co.
18		C2-54	M/s. Rani Constructions
19		C2-55	M/s. A.K.R. Coastal (JV)
20	(3) A M R Project	Pkg. No. 110	M/s. APR Constructions Ltd., Hyd.
21		OC-27/54/2005-06	M/s. Jaiprakash Associates Ltd., New Delhi
22		LLC Pump house	M/s. Ramky Infrastructures Ltd. Hyd & WPIL (JV)
23		Udaysamudram LIS	M/s. Maytas- MEIL- Kirloskar Bros. (JV)
24	(4) Rajiv Dummugudem LIS	1/1 (OC)	M/s Kirloskar Brothers Ltd., Pune
25		32/2006 (Cat-I)	M/s Hindusthan Construction Company LTD., Mumbai
26		33/2006 (Cat-I)	M/s Jaiprakash - Gayatri (JV), Hyderabad
27		66/2006 (Cat-II)	M/s.Rao Cons. - PJR Project Cons. (JV), Bangalore
28		67/2006 (Cat-II)	M/s AKR - Coastal (JV), Hyderabad

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29		68/2006 (Cat-II)	M/s. Rao Cons. - PJR Project Cons. (JV), Bangalore
30		1/2007-08	M/s Kranthi Constructions Ltd., Hyderabad
31	(5) Indira Dummugudem LIS	1/2 /2006(OC)	M/s Kirloskar Brothers Ltd., Pune
32		21/2006 (Cat-I)	M/s ZVSTROY -GDCL JV, Hyd
33		22/2006 (Cat-I)	M/s ZVSTROY GDCL JV, Hyd
34		31/2006 (Cat-I)	M/s IVRCL-SEW - Prasad (JV)
35		49/2006 (Cat-I)	M/s Engineering Projects (India) Ltd., Hyderabad
36		50/2006 (Cat-I)	M/s Engineering Projects (India) Ltd., Hyderabad
37		51/2006 (Cat-I)	M/s Engineering Projects (India) Ltd., Hyderabad
38	(6) Kalwakurthy - Mahathma Gandhi LIS	C1-28	M/s. IVRCL-SEW & Prasad (JV)
39		C1-29	M/s. Madhucon (P) Ltd-Sino-Hydro(JV).
40		C1-30	M/s. IVRCL-SEW & Prasad (JV)
41		OC-46/1/2004-05 (Lift - I)	M/s. Patel Engineering Ltd
42		OC-46/8/2005-06 (Lift - II)	M/s. Navayuga - IVRCL - SEW (JV)
43		OC-46/10/2005-06 (Lift - III)	M/s. Gammon India Ltd.
44	(7) Rajiv Bhima LIS	C2-13	M/s R M Mohite and Co - Bhoorathnam Construction Co. Pvt. Ltd (JV)
45		C2-14	M/s V.Prabhakar Reddy and Coromandel (JV)
46		C2-15	M/s Pratibha - Ch.Marthanda Rao and Co (JV)
47		C2-16	M/s R N Shetty and GSR (JV)
48		C2-17	M/s ALS - KVR (JV)
49		C2-18	M/s Sri Avantika - Sai Venkata (JV)
50		C2-20	M/s KNR - SLEC (JV)
51		C2-21	M/s SVEC Constructions Ltd.
52		C2-22	M/s SVEC Const. Ltd.
53		OC-27	M/s. KNR Const. Ltd. & BPL (JV)
54		46	M/s APR Constructions Ltd.
55		47	M/s Pioneer Builders Ltd.
56		48	M/s Pioneer Builders Ltd.
57		Parallel canal-I	M/s Pioneer Builders Ltd.
58		Parallel canal-II	M/s. R.M.N. Infrastructures Ltd., Hyderabad

59		OC-Lift - I	M/s Patel Engineering Limited
60		OC-Lift - II	M/s NEC - NCC - MAYTAS (JV)
61		SBBR Gates	M/s.Swapna constructions, Hyd
62	(8) Nettampadu - Jawahar LIS	C2-98	M/s. Manisha & Mulay (JV)
63		C2-100	M/s. Srinivasa Civil Works Pvt. Ltd., Hyd
64		C2-101	M/. P. Lakshmu Reddy & Kranthi Constructions
65		C2-104	A. Prabhakar Reddy Constns., Ltd., Hyd
66		C2-105	M/s. Srinivasa Civil Works Pvt. Ltd.Hyd
67		C2-106	M/s. Prathiba Constns. & Ch.Marthanda Rao (JV)
68		C2-107	M/s. Prathiba Constns. & Ch.Marthanda Rao (JV)
69		C2-108	M/s P. Lakshmu Reddy & Kranthi Constns (JV)
70		C2-109	M/s. Reddy Veeranna Constns Ltd., Bangalore
71		Stage-II OC-46/3/2005-06	M/s. Patel Engineering Ltd
72	(9) Koilsagar Project	Stage-I	M/s. IVRCL-SEW-Prasad (JV)
73		OC-46/6/2005-06 Stage-II	M/s. IVRCL-SEW-Prasad (JV)
74	(10) Sripada Yellampally -project	C1-42/1/2004-05	M/s. ITD Cementation India Ltd.
75		Dist. Canal network system Pckg 1	M/S HCPL-JSR (JV)
76		NTPC LIS	M/s. Subhash Projects & Marketing Ltd
77		StageII Phase I	M/s. IVRCL-SEW-Navayuga (JV)
78		construction of Gravity canal	
79		Gates	SEW-OM Metals (JV)
80		Manthani LIS	MEIL-KCCPL-Flow more (JV)
81		Kaddem Lift Scheme	MEIL-KBL-WEG (JV)
82		Dist. Canal network system Pckg III	SEL-GKC (JV)
83	(11) Kaleshwaram	OC 42/4/2208-09	IVRCL-KBL-MEIL(JV)
84	(12) Flood Flow Canal Project	Mid-Manair Reservoir	M/s SAPL –MBL -IVRCL
85		Mothe vagu Reservoir	M/s. BVSR Constructions Pvt. Ltd,M/s Swapna Const. Pvt.Ltd.
86	FFC-II	Pckg-1-R/S Canal from Km 0.00 to 17.75	M/s. BVSR Constructions Pvt. Ltd

87		Pckg-2-R/S Canal from Km17.75 to 36.125	M/s Engineering Projects India Ltd.
88		Pckg-3-L/S Canal from Km0.00 to 16.085	M/s Raghava -BVSR (JV)
89		Pckg-4-Ogulapur, (Thotapally) Reservoir	M/s Variegate Projects Pvt LTD
90		Pckg-5- LIS	M/s IVRCL-BATPASCO-ABB&AAG.(JV)
91		Pckg-6- Gouravelly Reservoir	M/s BVSR construction Pvt.LTD.
92		Pckg-7- IFFC II SRSP Gouravelly Canals	M/S SEL-GKC (JV)
93		Pckg-8- SRSP LIS	M/s MEIL-RATNA -KBL (JV)
94	(13) M.Baga Reddy Singur Project Canals	Singur Canals	M/s. Mahalakshmi Construction Pvt. Ltd.
95		Sri Cilarapu Rajanarsimha LIS	M/s Taipl-SVE-WPIL (JV) Secunderbad.
96	(14) Kinnerasani Reservoir Scheme	C2-8	M/s. Harvins Constructions
97	(15) Palemvagu Project	C2-7	M/s. ALS – KVR (JV)
98	(16) Modikuntavagu Project	C1-14/40/2005-07	M/s. Gammon India Ltd.
99	(17) Gollavagu Project	C2-10	M/s. Rao Constructions – PJR Projects (JV)
100	(18) Ralivagu Project	C2-11	M/s. Engineering Projects India Ltd.
101	(19) Neelwai Project	C2-12	M/s R.K.Ratna (JV)
102	(20) .Komarambheem Project	C1-18	M/s. Navayuga – Transstroy (JV)
103	(21) Diversion Scheme at Jagannadhapur	C1-19	M/s. Gammon India Limited
104	(22) Mathadivagu Project	C2-9	M/s. KNR – SLEC (JV)
105	(23) Choutpally Hanmanth Reddy LIS	EPC-1	M/s. Tappl-BRCCL-FPL (JV)
106	(24) Lendi Project	EPC – Package:	M/s. Mahalakshmi Construction Pvt. Ltd.
107	(25) Flood Banks Warangal & Khammam	Package No. 70	M/s SEW Constructions, Pvt., Ltd., Hyderabad
108		Package No. 71	M/s Manisha Indu (JV), Hyderabad
109		Package No. 72	M/s Manisha Indu (JV)
110		Package No. 73	M/s Manisha Indu (JV)
111		Package No. 74	M/s Manisha Indu (JV)

Dr. SHAIENDRA KUMAR JOSHI
PRINCIPAL SECRETARY TO GOVERNMENT

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SECTION OFFICER

**Annexure – V to G.O.Ms.No. 146, I&CAD(Reforms) Department ,
Dated: 08-10-2015**

(Methodology for calculating fuel factor for Earth work)

The quantum per cum of fuel inclusive of lubricant consumption for each type of earth work for canal and allied works for different leads is as follows:

FUEL (inclusive of lubricants) COMPONENT REQUIREMENT PER CUBIC METER IN EARTH WORK FOR CANAL CUTTING

S.No.	Description of work	All Soils upto SDR Ltrs/Cum	HDR Ltrs/Cum	F&F Rock Ltrs/Cum	HR Ltrs/Cum
1	Excavation	0.12	0.17	0.34	1.51
2	Conveyance				
	a) With ¼ Km lead	0.06			
	Total (1+a)	0.18			
	b) With ½ Km Lead	0.12	0.12	0.14	0.14
	Total (1+b)	0.24	0.29	0.48	1.65
	c) With 1 Km Lead			0.28	0.28
	Total (1+c)			0.62	1.79

Note: For canal works with deep cuts more than 9.0 m, the lead of 1.0 Km shall be adopted.

SDR: Soft Disintegrated Rock

HDR: Hard Disintegrated Rock

F&F Rock: Fractured and Fissured

HR: Hard Rock

FUEL (Inclusive of lubricants) COMPONENT REQUIREMENT PER CUBIC METER IN EARTH WORK FOR CONVEYED SOIL CONSOLIDATION

S.No.	Description	Lts/Cum
1	With ¼ Km lead from borrow area	0.46
2	With ½ Km lead from borrow area	0.51
3	With 1.0 Km lead from borrow area	0.63
4	With 2.0 Km lead from borrow area	0.86
5	With 3.0 Km lead from borrow area	1.09

For other types of works and for other than mentioned leads, the proposals if any received from the concerned Chief Engineers will be considered by the state level standing committee and the quantum per cum of the fuel component will be finalized after review and deliberations.

Classifications of soils and borrow area leads are to be adopted as per sanctioned estimate provisions.

As regards the payments already made towards the adjustment in the fuel component for the above type of works prior to this date, they have to be reviewed by the concerned Chief Engineers in line with present recommendations and differential amounts accrued there in shall be paid/recovered accordingly.

Dr. SHAILENDRA KUMAR JOSHI
PRINCIPAL SECRETARY TO GOVERNMENT

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SECTION OFFICER

**Annexure-VI to G.O.Ms.No. 146, I&CAD(Reforms) Department ,
Dated: 08-10-2015**

(Methodology for calculating fuel factor for other than Earth work)

1. In case of earth work conveyance, the capacity of truck in cubic meters shall be considered as 5.50 cubic meters.
2. In case of material conveyance the capacity of the truck in cubic meters shall be considered as 5.00 cubic meters.
3. The idle/wait charges, turning and providing extra oil consumption in ramps etc. In case of earth work conveyance for various leads in percentages shall be considered as follows:
 - i. Upto 3 Kms - 33%
 - ii. Above 3 Kms & upto 5 Kms - 20%
4. In case of material conveyance, no provision shall be allowed towards the idle/wait charges.
5. In case of material conveyance, the consumption of fuel with truck run with full load (onward journey) shall be considered as 3.5 Kms per litre while for truck with no load (return journey) shall be considered as 5 Kms per litre.

Based on the above, the quantum per cum of fuel (including lubricant) consumption for the following works.

1. Conveyance of soils with consolidation for the following leads.
 - a. With 3.0 Km lead from borrow area: 1.03 Ltrs/Cu.M
 - b. With 5.0 Km lead from borrow area : 1.34 Ltrs/Cu.M
 - c. With 10 Km lead from borrow area : 2.21 Ltrs/Cu.M
 - d. With 20 Km lead from borrow area : 3.86 Ltrs/Cu.M

Note: Detailed calculations need to be worked out. For other leads, quantum per Cu.M of fuel (including lubricant) consumption may be arrived.

2. Conveyance of materials with 10 Km lead : 1.07 Ltrs/Cu.M

Note: Detailed calculations need to be made. For other leads, quantum per Cu.M of fuel (including lubricant) consumption may be arrived.

3. Production of metal: 2.47 Ltrs/Cu.M

Note: Detailed calculations need to be made. The conveyance of the metal to the works site shall be as per the calculation.

4. In respect of cement, concrete grade works:

- a) With Batching Plant : 1.72 Ltrs/Cu.M with Diesel
+0.10Ltrs/Cu.M with Petrol.
- b) With Non-Batching Plant with : 0.88 Ltrs/Cu.M with Diesel
Mixer of 300/200 capacity + 0.10 with Petrol.

Note: Detailed calculations need to be made. The fuel inclusive of lubricant components requirement per Cu.M for conveyance of Coarse Aggregate and Fine Aggregate shall be added to the above as per the calculation.

(Contd...P-2)

5. In respect of Ice plant and accessories : 1.655 Ltrs/Cu.M

For other types of works, the proposals if any received from the concerned Chief Engineers will be considered by the committee and the quantum per cum of the fuel component will be finalized after review and deliberations.

Borrow area leads and Material conveyance leads are to be adopted as per sanctioned estimate provisions.

Based on these recommendations, the total percentage of fuel and lubricant shall be arrived for the package. To this, a provision of 10% over the total percentage shall be added for catering to miscellaneous and unforeseen items.

Dr. SHAILENDRA KUMAR JOSHI
PRINCIPAL SECRETARY TO GOVERNMENT

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SECTION OFFICER

**Annexure-VII to G.O.Ms.No. 146 , I&CAD(Reforms) Department ,
Dated: 08-10-2015**

**Guidelines for Preparation of Fuel factor for the works like excavation of
tunnels and other special works.**

1. For all the works, contractor's profit of 14% mentioned in the Standard Data is not allowed on Fuel.
2. For all the works 25% towards Lubricants is not allowed as it is already taken care in the cost of fuel as per the background calculations given by the Centre for Good Governance while preparing Standard Data.
3. For Tunnels, extra charges mentioned in the Standard Data under TAW towards air and water line, ventilation, lighting and electrical sub-stations/ demand charges which comes to 9.60% shall be restricted to 5.00% as some of them are covered in machinery component.
4. To adopt the extra items mentioned in the item 3 only Tunnel part and for all other items follow the relevant Standard data like DAW (Dam and allied works), CAW (Canal and allied works), CCDW (Cross Masonry and cross drainage works), GAW (Gates and allied works) etc.,.
5. While calculating the Fuel Factor, the value of total HSD required for the work shall be compared to Agreement Value of the EPC package.

Dr. SHAIENDRA KUMAR JOSHI
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